

Serial No. 10/663,402

IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is identified in the ensuing listing of the claims. This listing of the claims replaces all previously submitted claims listings.

1-20 (Canceled)

21. (Currently amended) Apparatus for facilitating removal of at least one object from a platen of programmed material consolidation equipment, comprising:

a substrate including an upper surface and a lower surface, at least the upper surface configured for ready removal from a surface of the at least one object without substantially altering the surface of the at least one object once the substrate has been removed from a platen of programmed material consolidation equipment; and

an adhesive coating on at least a portion of the lower surface, the adhesive coating comprising a material that will secure the substrate to the platen during a programmed material consolidation process and facilitate ready removal of the substrate and the at least one object from the platen following the programmed material consolidation process.

22. (Previously Presented) The apparatus of claim 21, wherein the substrate comprises a material to which the at least one object will adhere during fabrication thereof and which may be pulled from the at least one object following fabrication thereof.

23. (Previously Presented) The apparatus of claim 22, wherein the substrate comprises at least one of polyethylene, polyethyleneterephthalate, and polyethylene ethyl ketone.

24. (Previously Presented) The apparatus of claim 21, further comprising:
an object release coating on at least a portion of the upper surface, the object release coating comprising a material to which the at least one object will adhere during fabrication

Serial No. 10/663,402

thereof and which may be pulled from the at least one s object following fabrication thereof.

25. (Previously Presented) The apparatus of claim 24, wherein the object release coating comprises at least one of polyethylene, polyethyleneteraphthalate, and polyethylene ethyl ketone.

26. (Previously Presented) The apparatus of claim 21, wherein the substrate is substantially planar.

27. (Previously Presented) The apparatus of claim 21, wherein the upper surface is substantially planar.

28. (Withdrawn) The apparatus of claim 21, wherein the upper surface is contoured.

29. (Previously Presented) The apparatus of claim 21, further comprising: a nonstick coating on at least a portion of the platen, the nonstick coating configured to be positioned adjacent to the adhesive coating.

30. (Previously Presented) The apparatus of claim 29, wherein the nonstick coating comprises a fluorine-containing polymer.

31. (Previously Presented) The apparatus of claim 29, wherein the adhesive coating comprises a curable polymer which is tacky when in an at least partially uncured state and is not tacky when in a substantially cured state.

32. (Previously Presented) The apparatus of claim 31, wherein the adhesive coating will not adhere to the nonstick coating when in the substantially cured state.

Serial No. 10/663,402

33. (Previously Presented) The apparatus of claim 31, wherein the adhesive coating comprises a light-curable polymer.

34. (Previously Presented) The apparatus of claim 33, wherein the light-curable polymer comprises an ultraviolet-curable polymer.

35. (Currently amended) An object fabricated by a programmed material consolidation process including a plurality of adjacent, mutually adhered regions that comprise consolidated material, the object comprising:
an unfinished lowermost surface having substantially the same surface features as a lowermost corresponding surface of the object in finished form;
an object release including a planar object-securing surface element on the surface of the object;
and
adhesive that secured a platen-securing surface of the object release element to a platen of
programmed material consolidation equipment during fabrication of the object.

36. (Previously Presented) The object of claim 35, wherein the unfinished lowermost surface is substantially free of prefabrication remnants.

37. (Previously Presented) The object of claim 35, wherein the unfinished lowermost surface is substantially planar.

38. (Withdrawn) The object of claim 35, wherein the unfinished lowermost surface is nonplanar.

39. (Withdrawn) The object of claim 35, comprising at least one feature that protrudes beyond a plane of the unfinished lowermost surface.

Serial No. 10/663,402

40. (Currently amended) The object of claim 35, ~~further comprising:~~
an wherein the object release element on the is secured to an unfinished lowermost surface of the
object.

41. (Previously Presented) The object of claim 40, wherein an upper surface of the object release element which is in contact with at least a portion of the unfinished lowermost surface comprises a material that is readily removable from the unfinished lowermost surface.

42. (Previously Presented) The object of claim 41, wherein a lower surface of the object release element has an adhesive coating on at least a portion thereof.

43. (Previously Presented) The object of claim 42, wherein the adhesive coating is substantially cured.

44. (Previously Presented) The object of claim 43, wherein the adhesive coating is not tacky.

45. (Previously Presented) The object of claim 35, wherein the unfinished lowermost surface requires no more than substantially the same degree of finishing as other surfaces of the object.

46-68 (Canceled)

69. (Currently amended) Apparatus for facilitating removal of at least one object from a platen of programmed material consolidation equipment, comprising:
a substrate including an upper surface and a lower surface and comprising a material to which the
at least one object will adhere during fabrication thereof and which may be pulled from
the at least one object following fabrication thereof and removal of the substrate from a
platen of programmed material consolidation equipment.

Serial No. 10/663,402

70. (Previously Presented) The apparatus of claim 69, wherein the substrate comprises at least one of polyethylene, polyethyleneterephthalate, and polyethylene ethyl ketone.

71. (Previously Presented) The apparatus of claim 69, further comprising:
an object release coating on at least a portion of the upper surface, the object release coating comprising a material to which the at least one object will adhere during fabrication thereof and which may be pulled from the at least one object following fabrication thereof.

72. (Previously Presented) The apparatus of claim 71, wherein the object release coating comprises at least one of polyethylene, polyethyleneterephthalate, and polyethylene ethyl ketone.

73. (Previously Presented) The apparatus of claim 69, wherein the substrate is substantially planar.

74. (Previously Presented) The apparatus of claim 69, wherein the upper surface is substantially planar.

75. (Withdrawn) The apparatus of claim 69, wherein the upper surface is contoured.

76. (Previously Presented) The apparatus of claim 69, further comprising:
an adhesive coating on at least a portion of the lower surface, the adhesive coating comprising a material that will secure the substrate to the platen during a programmed material consolidation process and facilitate ready removal of the substrate and the at least one object from the platen following the programmed material consolidation process

Serial No. 10/663,402

77. (Previously Presented) The apparatus of claim 76, wherein the adhesive coating comprises a curable polymer which is tacky when in an at least partially uncured state and is not tacky when in a substantially cured state.

78. (Currently amended) The apparatus of claim 77, wherein the adhesive coating will not adhere to the ~~nonstick coating platen~~ when in the substantially cured state.

79. (Previously Presented) The apparatus of claim 77, wherein the adhesive coating comprises a light-curable polymer.

80. (Previously Presented) The apparatus of claim 79, wherein the light-curable polymer comprises an ultraviolet-curable polymer.

81. (Withdrawn) The apparatus of claim 69, wherein the lower surface is configured to be secured to a surface of the platen as negative pressure is applied thereto through the platen.

82. (Withdrawn) The apparatus of claim 81, wherein the lower surface is configured to seal against the surface of the platen as the negative pressure is applied thereto.

83-91 (Canceled)

92. (New) Apparatus for facilitating removal of at least one object from a platen of programmed material consolidation equipment, comprising:
a substrate including an upper surface and a lower surface and comprising at least one of polyethylene, polyethyleneteraphthalate, and polyethylene ethyl ketone; and
an adhesive coating on at least a portion of the lower surface, the adhesive coating comprising a material that will secure the substrate to the platen during a programmed material consolidation process and facilitate ready removal of the substrate and the at least one object from the platen following the programmed material consolidation process.

Serial No. 10/663,402

93. (New) The apparatus of claim 92, wherein the substrate comprises a material to which the at least one object will adhere during fabrication thereof and which may be pulled from the at least one object following fabrication thereof.

94. (New) The apparatus of claim 92, wherein the substrate includes an object release coating on the upper surface thereof.

95. (New) The apparatus of claim 92, wherein the adhesive coating comprises a curable polymer which is tacky when in an at least partially uncured state and is not tacky when in a substantially cured state.

96. (New) The apparatus of claim 95, wherein the adhesive coating will not adhere to the platen when in the substantially cured state.

97. (New) The apparatus of claim 95, wherein the adhesive coating comprises a light-curable polymer.

98. (New) The apparatus of claim 97, wherein the light-curable polymer comprises an ultraviolet-curable polymer.

99. (New) Apparatus for facilitating removal of at least one object from a platen of programmed material consolidation equipment, comprising:
a platen of programmed material consolidation equipment including a nonstick coating on at least a portion thereof;
a substrate including an upper surface and a lower surface; and
an adhesive coating on at least a portion of the lower surface, the adhesive coating comprising a material that will secure the substrate to at least the nonstick coating on the platen during a programmed material consolidation process and facilitate ready removal of the substrate

Serial No. 10/663,402

and the at least one object from the platen following the programmed material consolidation process

100. (New) The apparatus of claim 99, wherein the non-stick coating comprises a fluorine-containing polymer.

101. (New) The apparatus of claim 99, wherein the adhesive coating comprises a curable polymer which is tacky when in an at least partially uncured state and is not tacky when in a substantially cured state.

102. (New) The apparatus of claim 101, wherein the adhesive coating will not adhere to the platen when in the substantially cured state.

103. (New) The apparatus of claim 101, wherein the adhesive coating comprises a light-curable polymer.

104. (New) The apparatus of claim 103, wherein the light-curable polymer comprises an ultraviolet-curable polymer.

105. (New) Apparatus for facilitating removal of at least one object from a platen of programmed material consolidation equipment, comprising:
a substrate including an upper surface and a lower surface; and
an adhesive coating comprising a curable polymer, which is tacky when in an at least partially uncured state and is not tacky when in a substantially cured state, on at least a portion of the lower surface, the adhesive coating comprising a material that will secure the substrate to the platen during a programmed material consolidation process and facilitate ready removal of the substrate and the at least one object from the platen following the programmed material consolidation process.

Serial No. 10/663,402

106. (New) The apparatus of claim 105, wherein the adhesive coating will not adhere to the platen when in the substantially cured state.

107. (New) The apparatus of claim 105, wherein the adhesive coating comprises a light-curable polymer.

108. (New) The apparatus of claim 107, wherein the light-curable polymer comprises an ultraviolet-curable polymer.

109. (New) Apparatus for facilitating removal of at least one object from a platen of programmed material consolidation equipment, comprising:
a substrate comprising at least one of polyethylene, polyethyleneterephthalate, and polyethylene ethyl ketone and including an upper surface and a lower surface and comprising a material to which the at least one object will adhere during fabrication thereof and which may be pulled from the at least one object following fabrication thereof.

110. (New) The apparatus of claim 109, wherein the substrate comprises a material to which the at least one object will adhere during fabrication thereof and which may be pulled from the at least one object following fabrication thereof.

111. (New) The apparatus of claim 109, wherein the substrate includes an object release coating on the upper surface thereof.